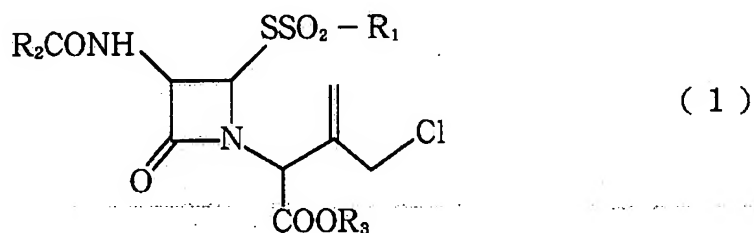


Listing of Claims

The following listing of claims replaces all prior versions and listings of claims in the application.

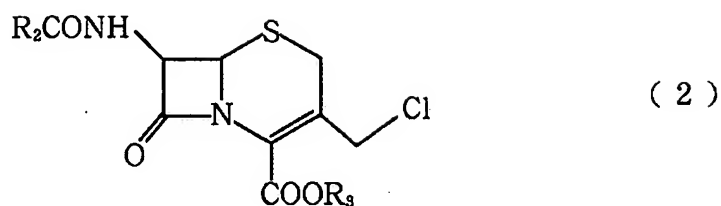
1. (Original) A process for preparing a crystalline 3-chloromethyl-3-cephem derivative, comprising the reaction step of performing a reaction of a chlorinated azetidinone derivative with an alcoholate in a solvent containing at least one of alcohols at a pH of 8 or less,

wherein the chlorinated azetidinone derivative is expressed by Chemical Formula (1):



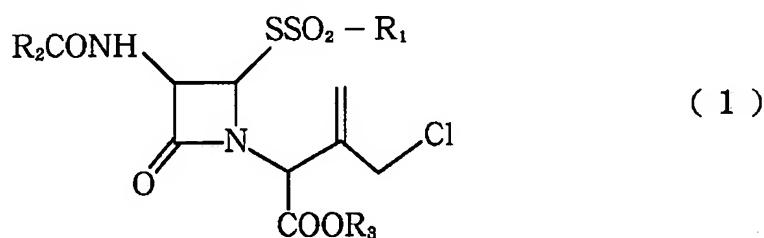
where R₁ represents one selected from the group consisting of substituted and unsubstituted aryl groups and substituted and unsubstituted heterocyclic residues, and R₂ and R₃ each represent one selected from the group consisting of substituted and unsubstituted aromatic hydrocarbon groups, and

wherein the 3-chloromethyl-3-cephem derivative is expressed by Chemical Formula (2):



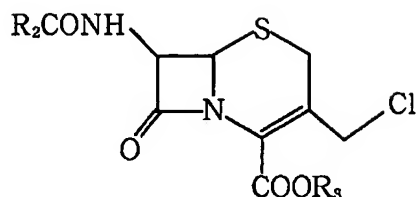
where R_2 and R_3 each represent one selected from the group consisting of substituted and unsubstituted aromatic hydrocarbon groups.

2. (Original) A process for preparing a crystalline 3-chloromethyl-3-cephem derivative, comprising the reaction step of performing a reaction of a chlorinated azetidinone derivative with an alcoholate in a solvent containing at least one of alcohols and an ether at a pH of 8 or less, wherein the chlorinated azetidinone derivative is expressed by Chemical Formula (1):



where R_1 represents one selected from the group consisting of substituted and unsubstituted aryl groups and substituted and unsubstituted heterocyclic residues, and R_2 and R_3 each represent one selected from the group consisting of substituted and unsubstituted aromatic hydrocarbon groups, and

wherein the 3-chloromethyl-3-cephem derivative is expressed by Chemical Formula (2) :



(2)

where R_2 and R_3 each represent one selected from the group consisting of substituted and unsubstituted aromatic hydrocarbon groups.

3. (Original) The process according to Claim 1 or 2, wherein the reaction step is performed by adding solution A containing the chlorinated azetidinone derivative and solution B containing the alcoholate into solution C containing at least one of the alcohols, and wherein the chlorinated azetidinone derivative is dissolved in a solvent containing an ether, and the alcoholate is dissolved in a solvent containing at least one of the alcohols.

4. (Original) The process according to Claim 3, wherein part of solution A in an amount equivalent to 5 to 30 percent on a mole basis of the entire amount of chlorinated azetidinone derivative involved in the reaction is added to solution C, and then the rest of solution A and solution B are simultaneously added to solution C.

5. (Currently Amended) The process according to ~~any one of Claims 1 to 4~~ Claim 1 or 2, wherein 0.8 to 1.5 mol of the alcoholate is allowed to react relative to 1 mol of the chlorinated azetidinone derivative.

6. (Currently Amended) The process according to ~~any one of Claims 1 to 4~~ Claim 1 or 2, wherein the alcohols are methanol and ethanol.

7. (Currently Amended) The process according to ~~any one of Claims 2 to 4~~ Claim 2, wherein the ether is dioxane.

8. (Currently Amended) The process according to ~~any one of Claims 1 to 4~~ Claim 1 or 2, wherein the alcoholate is one of sodium methylate and sodium ethylate.

9. (Currently Amended) The process according to ~~any one of Claims 1 to 8~~ Claim 1 or 2, wherein the reaction is performed at a temperature of 5°C or less.

10. (Currently Amended) The process according to Claim 3 ~~or 4~~, wherein the ether is dioxane, and the solvent containing the ether, dissolving the chlorinated azetidinone derivative is a mixed solvent of dioxane and an alcohol.

11. (Currently Amended) The process according to Claim 3 ~~or 4~~, wherein the solvent containing at least one of the alcohols, dissolving the alcoholate is the at least one of the alcohols.

12. (Currently Amended) The process according to Claim 3 ~~or 4~~, wherein solution C further contains dioxane.

13. (Currently Amended) The process according to Claim 3 ~~to 12~~, wherein solution A and solution B are added by dripping.

14. (Currently Amended) The process according to ~~any one of Claims 1 to 13~~ Claim 1 or 2, wherein the reaction is performed in the absence of water.